

**UNITED STATES BANKRUPTCY COURT
SOUTHERN DISTRICT OF NEW YORK**

SECURITIES INVESTOR PROTECTION
CORPORATION,

Plaintiff-Applicant,

v.

BERNARD L. MADOFF INVESTMENT
SECURITIES LLC,

Defendant.

In re:

BERNARD L. MADOFF,

Debtor.

Adv. Pro. No. 08-01789 (SMB)

SIPA LIQUIDATION

(Substantively Consolidated)

**EXPERT REPORT OF
LISA M. COLLURA, CPA, CFE, CFF**

**Reconciliation of Cash Transactions
for All BLMIS Customers and
Analysis of IA Business Cash Activity**

January 16, 2019

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I. PROFESSIONAL BACKGROUND

1. I am a Senior Managing Director in the Forensic and Litigation Consulting practice of FTI Consulting, Inc. ("FTI"), with 25 years of experience in accounting, auditing and litigation consulting services. I specialize in providing forensic accounting and financial fraud investigative services in connection with internal investigations on behalf of trustees, boards of directors and audit committees of companies.
2. I have extensive experience in conducting large-scale, fact-finding investigations into fraudulent financial transactions, including tracing significant flows of funds between accounts and entities. During my career at FTI, I have assisted in the investigation of several of the largest fraud cases in the United States.
3. I am a Certified Public Accountant (CPA), a Certified Fraud Examiner (CFE), a member of the American Institute of Certified Public Accountants (AICPA), and am Certified in Financial Forensics (CFF) by the AICPA. My curriculum vitae, attached as **Exhibit 1** to this report, further describes my professional credentials, experience, and qualifications, including my testimony in the last four years.

II. SCOPE OF ASSIGNMENT

4. Bernard L. Madoff Investment Securities LLC ("BLMIS") was an investment firm owned and operated by Bernard L. Madoff ("Madoff"). On December 11, 2008, Madoff was arrested for violating multiple securities laws in connection with running a Ponzi scheme through the investment advisory business of BLMIS (the "IA Business"). On December 15, 2008, Irving H. Picard was appointed as the Trustee for the liquidation of the business of BLMIS, and Baker & Hostetler LLP was retained as his counsel. Shortly thereafter, FTI was retained by Baker & Hostetler LLP, on behalf of the Trustee, to analyze, among other things, the financial affairs of BLMIS and to assist the Trustee with the liquidation of BLMIS. As part of our engagement, FTI was tasked with the exercise of reconstructing the books and records of

BLMIS, including all records of the cash transactions related to the BLMIS IA Business customer accounts as far back as the records allow.

5. Matthew B. Greenblatt, also a Senior Managing Director at FTL, and a team of professionals working under his supervision, was specifically tasked with creating chronological listings of all cash and principal transactions, including cash deposit and withdrawal transactions, for every BLMIS customer account, as set forth more fully in the Expert Report of Matthew B. Greenblatt regarding the Methodology for the Principal Balance Calculation (the "Principal Balance Calculation Report").

6. The sources of cash deposit and withdrawal transactions related to BLMIS customer accounts include customer statements and other relevant information available within BLMIS's records, including Portfolio Management Reports, Portfolio Management Transaction Reports, spiral-bound notebooks, and a data table from BLMIS's computer system referred to as the "Checkbook File," which is the only available BLMIS record of cash transactions for the time period from December 1, 2008 through December 11, 2008. *See* Principal Balance Calculation Report for further discussion regarding these sources. For purposes of my report, I use the term "customer statements" to refer to these sources collectively.

7. I, along with a team working under my supervision, was specifically tasked with performing forensic analyses to determine the following:

- Whether the cash deposit and withdrawal transactions as reflected on the customer statements for all BLMIS customers reconciled to available BLMIS bank records;
- Whether handwritten ledgers and other documents maintained by BLMIS employees consistently reflected customer cash deposit and withdrawal transactions;
- The purpose of the activity in the primary bank account used for BLMIS customer deposits and withdrawals that I did *not* reconcile to cash transactions reflected on the BLMIS customer statements, including investments in Treasury Bills; and

- Whether interest earned on Treasury Bills purchased directly or indirectly with funds from the primary bank account used for BLMIS customer deposits and withdrawals was sufficient to pay BLMIS customer withdrawals.

8. For purposes of this report, I use the term “reconciled” to indicate when I have matched, agreed and/or determined consistency between cash deposits and withdrawals reflected on BLMIS customer statements to information or data per another source (*e.g.*, amounts on BLMIS bank records, and/or handwritten ledgers maintained by BLMIS employees).

9. FTI is being compensated at a rate of \$670 per hour for my professional time incurred in performing the work necessary to prepare this report. FTI’s fees are not contingent on the conclusions reached in this report or the outcome of the subject litigation.

III. METHODOLOGY

10. To determine whether the cash deposit and withdrawal transactions reflected on the customer statements for all BLMIS customers reconciled to available BLMIS bank records, I, using my experience as a forensic accountant and investigator, along with my staff, first identified and gathered the relevant and available records related to the BLMIS bank accounts.

We then performed the following:

- Reviewed hundreds of thousands of pages of records related to BLMIS’s bank accounts, including monthly bank statements, cancelled checks and deposit slips, obtained from BLMIS’s files and/or produced by third-party financial institutions, which cover a ten-year period from December 1998 to December 2008;
- Analyzed close to 150,000 transactions reflected within these bank records; and
- Reconciled the cash deposit and withdrawal transactions reflected on the BLMIS customer statements to the cash transactions reported in the available BLMIS bank records.

11. Next, I reviewed available handwritten ledgers and other documents maintained by BLMIS employees to determine whether they consistently reflected customer cash deposits and

cash withdrawals for both the period when BLMIS bank records were available (*i.e.*, December 1998 – December 2008) and the period when such records were not available (*i.e.*, prior to December 1998). My team and I first identified all available handwritten documents within BLMIS's records that reflected cash activity in and out of BLMIS bank accounts. We then performed the following:

- Analyzed the handwritten documents for each month-end day during the ten-year period from December 1998 to December 2008 and reconciled the cash activity reflected on these handwritten documents to available BLMIS bank records and cash deposits and withdrawals reflected on BLMIS customer statements; and
- Analyzed the handwritten documents for each month-end day prior to December 1998, which were available back to December 1990, and reconciled BLMIS customer cash deposits and withdrawals reflected on BLMIS customer statements to the cash activity reflected on these handwritten documents.

12. Next, I examined the activity in the primary bank account used for BLMIS customer deposits and withdrawals (as further described below and defined as the "703 Account") that I did *not* reconcile to cash transactions reflected on the BLMIS customer statements, and I performed the following based on available bank records:

- Analyzed transactions relating to short-term investments made directly from the 703 Account to determine: (a) the types, amounts, and timing of these short-term investments, and (b) the related income earned on the investments;
- Analyzed other transactions in the 703 Account, including transfers to and from bank and brokerage accounts held in the name of BLMIS or Madoff, to determine: (a) the amounts and timing of the flow of funds between the 703 Account and the brokerage accounts, (b) the types, amounts, and timing of investments made from these brokerage accounts, and (c) the related income earned on investments in the brokerage accounts; and
- Determined whether these non-customer transactions were for BLMIS's cash management purposes.

13. Finally, to determine whether interest earned on Treasury Bills purchased directly or indirectly with funds from the 703 Account was sufficient to pay BLMIS customer withdrawals, I first determined the total amount of interest earned on the Treasury Bills each year during the ten-year period from December 1998 to December 2008. I then compared the annual interest amounts to the total amount of BLMIS customer withdrawals each year during the same ten-year period.

14. The documents and data that I considered in connection with this report are listed in **Exhibit 2**. I reserve the right to supplement my report based on any additional documents or information received.

IV. SUMMARY OF FINDINGS AND CONCLUSIONS

15. Based on the forensic analyses performed, as described above and throughout this report, as well as my skills, knowledge, experience, education and training that I applied to the documents and information available to me as of the date of this report, my findings and conclusions are summarized as follows:

- I reconciled 99% of the approximately 225,000 cash deposit and withdrawal transactions reflected on all BLMIS customer statements during the time period of December 1998 to December 2008 to the available BLMIS bank records for the same time period, demonstrating that the customer statements accurately reflected BLMIS customer cash transactions. The remaining 1% that I was unable to reconcile consists primarily of withdrawal transactions for which copies of the related cancelled checks were not available. Based on the results of my reconciliation of 99% of the cash transactions, I can reasonably infer that I would have been able to reconcile these withdrawal transactions had copies of the related cancelled checks been available. Further, based on my review of the activity in BLMIS bank accounts used for customer cash transactions, from December 1998 to December 2008, customer deposits were made into one bank account from which BLMIS customer withdrawals were directly or indirectly made.

- Handwritten documents maintained by BLMIS employees during the period when BLMIS bank records were available (from December 1998 to December 2008) reflected BLMIS customer cash deposits and withdrawals, which I reconciled to both BLMIS bank records and BLMIS customer statements. Of the approximately 4,700 cash deposit and cash withdrawal transactions dated month-end between December 1998 and December 2008 reflected on BLMIS customer statements, I reconciled over 99% to the handwritten documents and the BLMIS bank records. Therefore, I can reasonably conclude that these handwritten documents can be relied upon as an indication of BLMIS customer cash activity in the absence of BLMIS bank records during the period prior to December 1998.
- Handwritten documents between December 14, 1990 and November 1998 reflected a consistent pattern of cash activity where BLMIS customer cash deposits were reflected on the handwritten documents as deposits into bank accounts used by the IA Business for cash transactions with customers, and customer cash withdrawals were reflected on the handwritten documents as outflows from these same bank accounts. Of the approximately 5,000 cash deposit and cash withdrawal transactions dated month-end between December 1990 and November 1998 reflected on BLMIS customer statements, I reconciled approximately 94% to the handwritten documents.
- The activity in the 703 Account that I did not reconcile to BLMIS customer cash transactions consisted of investing activity for BLMIS's cash management purposes, including purchases and sales of Treasury Bills, directly from the 703 Account and through brokerage accounts.
- From 1999 to 2008, the annual interest earned on Treasury Bills purchased directly and indirectly with funds from the 703 Account ranged from 0% to 1% of annual withdrawals from BLMIS customer accounts and was therefore insufficient to pay BLMIS customer withdrawals.

V. RECONCILIATION OF CASH TRANSACTIONS FOR ALL BLMIS CUSTOMERS

A. OVERVIEW

16. As set forth in the Principal Balance Calculation Report, a team from FTI working under Mr. Greenblatt's supervision created chronological listings of all cash and principal transactions, including cash deposit and withdrawal transactions, for every BLMIS customer account. I was tasked with reconciling the customer cash deposit and withdrawal transactions to available BLMIS bank records to assist in the determination of whether the cash transactions reflected on the customer statements for all BLMIS customers were fairly and accurately represented (the "Global Reconciliation").

B. BLMIS BANK ACCOUNTS

17. My team and I reviewed available bank records for more than 90 bank and brokerage accounts in the name of either BLMIS or Madoff,¹ and found that, primarily, the following three bank accounts were used by BLMIS for customer deposits and withdrawals during at least the ten-year period from December 1998 to December 2008:²

- JPMorgan Chase account #xxxxx1703 (the "703 Account")³
- JPMorgan Chase account #xxxxxxxxx1509 (the "509 Account")
- Bankers Trust account #xx-xx0-599 (the "BT Account")

18. Records for these three accounts consist of monthly bank statements, copies of deposited checks, deposit slips, and cancelled checks. Records related to the 703 Account and the 509 Account were available from December 1998 to December 2008 and were obtained from

¹ See **Exhibit 3** for a listing of known bank accounts held by BLMIS and/or Madoff.

² Between January 2006 and April 2006, there were four customer withdrawal transactions totaling \$262,000,000 that were paid from account #xxx-xxx6-621 held at the Bank of New York (the "BONY 621 Account"). The BONY 621 Account was one of the primary operating bank accounts used by BLMIS's proprietary trading and market making businesses (the "Proprietary Trading Business"). In June 2006, there were two transfers totaling \$261,816,950 from the 703 Account to the BONY 621 Account to reimburse the BONY 621 Account for funding the withdrawals to customers.

³ Personal Identifying Information has been redacted throughout this report and the accompanying exhibits.

BLMIS's files as well as from JPMorgan Chase & Co. ("JPMC").⁴ In addition to hard copy documents, JPMC produced an electronic file that provides details of wire transfers in and out of the 703 Account from January 1, 2002 to December 11, 2008 (the "JPMC Wire File").⁵ Records related to the BT Account were available from December 1998 to May 1999 and were obtained from BLMIS's files.⁶

19. In the aggregate, FTI had available bank records related to the BLMIS bank accounts used for customer deposits and withdrawals for a ten-year period from December 1998 to December 2008 (the "10 Year Period"). To assist in our analysis of these bank records, which included copies of monthly bank statements and cancelled checks, we captured the transaction information from these records and converted the information into an electronic format through the use of a combination of Optical Character Recognition (OCR) software and manual entry. This electronic data, which accurately reflects the underlying records, became the basis for our reconciliation of the cash transactions reported in the BLMIS bank records to the cash deposits and withdrawals reflected on BLMIS customer statements.

⁴ The October 1999 bank statement for the 509 Account could not be located. However, I was able to use other available documents, such as the 703 Account statements, to estimate the activity in the 509 Account during October 1999. In addition, there is activity reflected on the monthly bank statements for the 703 Account and 509 Account for which corresponding copies of deposited checks, deposit slips and/or cancelled checks were missing from the documents produced by JPMC and/or could not be located in BLMIS's records. As reflected in my summary of findings and other results described throughout my report, these missing documents had a minimal impact on my overall analysis and reconciliation.

⁵ This file was missing data for transactions dated December 11, 2004 to December 31, 2004. However, I was able to use other available documents, such as the 703 Account statements, to obtain the necessary information to complete our analysis and reconciliation.

⁶ Statements for June through August 1999, October 1999, December 1999 and July 2000 for the BT Account were also found in BLMIS's records. However, May 1999 appears to be the last month of significant activity in the BT Account. There was no activity in the account during the months of June through August 1999, and the statements for these months showed an ending balance of \$26,523. In October 1999, the only transaction in the account was to transfer the \$26,523 remaining balance to the 703 Account and zero out the BT Account. The December 1999 and July 2000 statements for the BT Account both showed a zero balance.

The 703 Account

20. Based on my review of the available BLMIS bank records, I determined that the 703 Account was the primary bank account used for BLMIS customer deposits and withdrawals.⁷ My team and I reviewed and analyzed every one of the transactions reported in the available monthly bank statements for the 703 Account from December 1998 to December 2008 to determine, among other things, whether the transactions were related to a BLMIS customer deposit or withdrawal.

21. The results of my analysis of the activity in the 703 Account from the available bank records for December 1998 to December 2008 are set forth in an Excel spreadsheet titled “JPMC 703 Account Activity – December 1998 to December 2008” which is attached as **Exhibit 4**.

22. In conducting our reconciliation of the cash transactions reported in the 703 Account bank records to the cash transactions reflected on the BLMIS customer statements, we first matched transactions based on the transaction date and amount, but also manually reviewed thousands of transactions to confirm our results. In addition, there were instances when we reconciled multiple transactions on the BLMIS customer statements to a single transaction on the BLMIS bank statements. For example, a deposit into the 703 Account that related to multiple BLMIS customers appeared as one transaction on the monthly bank statement for the 703 Account. In that case, we reconciled the 703 Account transaction to a combination of multiple BLMIS customer transactions.⁸

23. FTI assigned a unique identification number to each of the transactions reported on the available 703 Account bank statements. *See* “703 ID” in the first column of the detail tab of Excel spreadsheet “JPMC 703 Account Activity – December 1998 to December 2008” (attached as **Exhibit 4**). FTI also assigned a unique identification number to each one of the customer deposit and withdrawal transactions for every BLMIS customer account. *See* “CM ID” in a

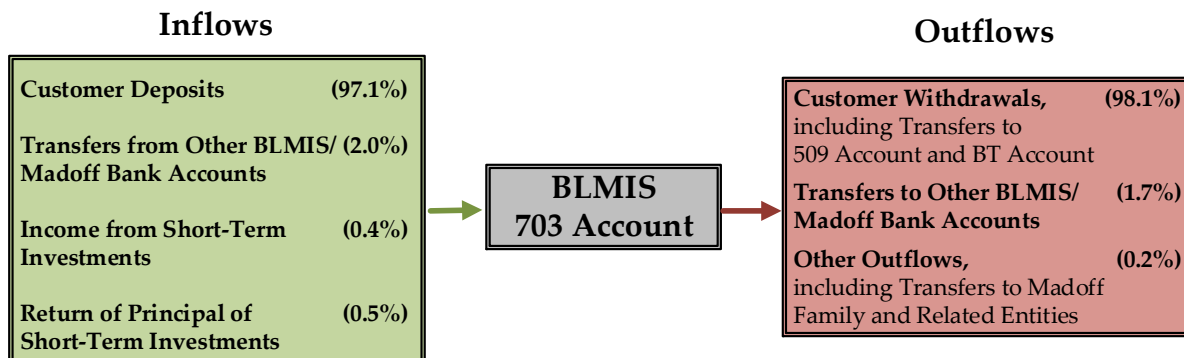
⁷ Based on available bank statements, the 703 Account was held in the name of Bernard L. Madoff until September 2002, when the name on the 703 Account was changed to Bernard L. Madoff Investment Securities.

⁸ As another example, BLMIS withheld certain amounts from foreign account holders and made payments to the Internal Revenue Service on behalf of these customers. In these cases, we reconciled one payment from the 703 Account to multiple related transactions per the BLMIS customer statements.

separate column of the detail tab of **Exhibit 4**. Once a specific transaction reported in a 703 Account statement was matched to a specific customer deposit or withdrawal transaction reflected on the BLMIS customer statements, we recorded the corresponding unique CM ID in the respective column of **Exhibit 4**. This matching formed a link between the cash transactions per the bank records and the cash transactions per the customer statements. This link ensured that no two customer cash transactions were incorrectly matched to the same cash transaction per the bank records or vice versa.

24. Based on my review of the activity in the 703 Account from December 1998 to December 2008, I determined that approximately 97% of the inflows into the account during this period consisted of customer deposits and approximately 98% of the outflows from this account during this period consisted of customer withdrawals. **Figure 1** below is a flowchart summarizing the activity in the 703 Account from December 1998 to December 2008. The results of my analysis support that from December 1998 to December 2008, BLMIS customer deposits were made into one account - the 703 Account - an account from which BLMIS customer withdrawals were made. See **Section VII** below for further discussion of the remaining activity in the 703 Account (*i.e.*, other than customer deposits or withdrawals).

Figure 1
Flowchart of Activity in the 703 Account
December 1998 – December 2008



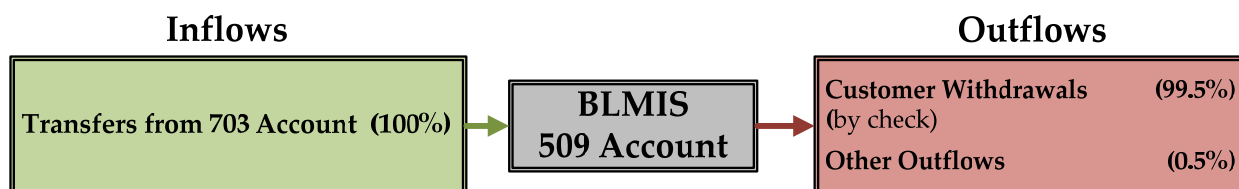
The 509 Account

25. Based on my review of the available bank records related to the 509 Account, I determined that the 509 Account was a disbursement account funded by the 703 Account.⁹ On a daily basis, funds were transferred from the 703 Account to the 509 Account to cover the total amount of checks clearing the 509 Account on that day. Thus, from December 1998 to December 2008, the inflows into the 509 Account consisted solely of transfers from the 703 Account, and the outflows from the 509 Account were solely in the form of checks.

26. My team and I performed an analysis of the activity in the 509 Account, similar to the analysis we performed with respect to the 703 Account, to determine whether the outflows from the 509 Account were related to BLMIS customer withdrawals. However, in this case, our analysis relied more heavily on our review of the cancelled checks because the statements themselves lacked the necessary detail. The results of my analysis of the activity in the 509 Account from the available bank records for December 1998 to December 2008 are set forth in an Excel spreadsheet titled “JPMC 509 Account Activity – December 1998 to December 2008” which is attached as **Exhibit 5**.

27. Based on my review of the activity in the 509 Account from December 1998 to December 2008, I determined that 100% of the inflows into the 509 Account were transfers from the 703 Account, the account consisting primarily of customer deposits, and over 99% of the checks written from the 509 Account consisted of customer withdrawals. **Figure 2** below is a flowchart summarizing the activity in the BLMIS 509 Account.

Figure 2
Flowchart of Activity in the 509 Account
December 1998 – December 2008



⁹ Based on available bank statements, the 509 Account was held in the name of Bernard L. Madoff until September 2002, when the name on the 509 Account was changed to Bernard L. Madoff Investment Securities.

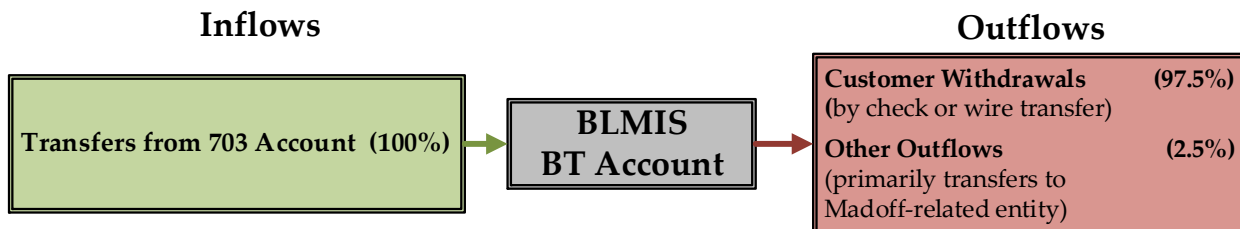
The BT Account

28. Based on my review of the available bank records related to the BT Account, from at least December 1998 through May 1999, the BT Account was also funded by transfers from the 703 Account. Outflows from the BT Account were in the form of both checks and wire transfers.

29. My team and I performed a reconciliation analysis of the activity in the BT Account, similar to those described above, to determine whether the outflows from the BT Account were related to BLMIS customer withdrawals. The results of my analysis of the activity in the BT Account from the available bank records for December 1998 to May 1999 are set forth in an Excel spreadsheet titled "BT 599 Account Activity – December 1998 to May 1999" which is attached as **Exhibit 6**.

30. Based on my review of the activity in the BT Account during this period, I determined that 100% of the inflows into the BT Account were transfers from the 703 Account, the account consisting primarily of customer deposits, and that over 97% of the outflows from the BT Account were related to customer withdrawals. **Figure 3** below is a flowchart summarizing the activity in the BT Account:

Figure 3
Flowchart of Activity in the BT Account
December 1998 – May 1999



C. RESULTS OF RECONCILIATION

31. I reconciled 99% of the approximately 225,000 cash deposit and withdrawal transactions reflected on all BLMIS customer statements during the time period of December 1998 to December 2008 to the available BLMIS bank records for the same time period,

demonstrating that the customer statements accurately reflected BLMIS customer cash transactions. The majority of the remaining 1%, or approximately 2,200 transactions, consist primarily of withdrawal transactions for which copies of the related cancelled checks were not available. Based on the results of my reconciliation of 99% of the cash transactions, I can reasonably infer that I would have been able to reconcile these withdrawal transactions had the related cancelled checks been available. Only 13 transactions of this remaining 1% (representing less than 0.006% of the approximately 225,000 cash transactions) were reflected on the customer statements, but could not be reconciled to available BLMIS bank records.

32. Based on my review of the activity in the three BLMIS bank accounts used for customer cash transactions from December 1998 to December 2008, customer deposits were made into one account – the 703 Account – from which BLMIS customer withdrawals were made directly, or indirectly through the 509 Account or the BT Account. Further, I saw no disbursement of funds for the purchase of stocks or equities on behalf of customers of the IA Business, nor did I see any receipt of funds from the sale of stocks or equities. Instead, I saw billions of dollars of inflows from customers depositing funds into the IA Business and billions of dollars of outflows to customers in the form of withdrawals.

VI. ANALYSIS OF HANDWRITTEN LEDGERS AND OTHER DOCUMENTS

A. OVERVIEW

33. My team and I identified all available handwritten documents within BLMIS's records that reflected cash activity in and out of BLMIS bank accounts, including BLMIS customer cash deposits and withdrawals. We identified two types of handwritten documents:

- **Handwritten Ledgers** – the Handwritten Ledgers contained multiple days' worth of activity on a single page, with the specific activity from each day handwritten on one line. We identified Handwritten Ledgers in BLMIS's records that covered an

18-year period from December 14, 1990 through December 11, 2008.¹⁰ **Figure 4** below is an example of a Handwritten Ledger for days in June and July 2003. *See also Exhibit 7.*

Figure 4
Example of a Handwritten Ledger

[illegible]

- **Daily Sheets** – the Daily Sheets contained information similar to the information on the Handwritten Ledgers, however, on the Daily Sheets, the activity for a given day was included on a separate page and the amounts were rounded to the nearest thousand. We identified Daily Sheets in BLMIS’s records that covered nearly a 15-

¹⁰ There were no missing Handwritten Ledgers during this 18-year period. Beginning in 2003, two versions of Handwritten Ledgers existed in BLMIS's records for many of the month-end periods under review. I reviewed and analyzed all available versions of the Handwritten Ledgers.

year period from April 4, 1994 through December 11, 2008.¹¹ Figure 5 below are examples of Daily Sheets. See also Exhibit 8.1 for an example of Daily Sheets pre-November 1998 and Exhibit 8.2 for an example of a Daily Sheet post-November 1998.¹²

Figure 5
Examples of Daily Sheets

Pre-November 1998

BERNARD L. MADOFF Investment Securities 885 Third Avenue New York, NY 10022-4834	
3-29-98	
CHEMICAL BANK	
+ 83710	BAL 3-28
- 65	cks out
+ 20	WIRE IN - WESTWOOD
+ 200	" " - PRINGO CLB
+ 500	" " - N SACHS
+ 1100	" " - SCHUPKE
+ 2000	" " - YESOD
+ 3000	" " - BPI MULTADVISERS
+ 1762	My Deposit 2000 C.M. 5000 E.M.
- 14200	Tony Out 298 HAD 75748
- 27300	WIRE Out - BANKERS
- 32800	" " - BK of NY
- 10000	" " - CREDIT LYONS
+ 15000	N.L. Deposit
+22927	
65000.00 MAILED Out of STATE	
Giving you 16 ml 4-1	

Post-November 1998

C.M. 6-30-03	C.M. - WIRE ACTIVITY
+ 375722 BALANCE	✓ 23800 WIRE out - BNP
- 550 CHECKS OUT *	✓ 7265 WIRE out - BNP
- 1780 CHECKS OUT **	✓ 18000 WIRE out - TRENDON
- 0 N.L. DEPOSIT	✓ 3000 WIRE out - RPP
- 0 TRANS	✓ 3000 WIRE out - STERLING
- 26959 NET WIRES ****	✓ 500 WIRE out - BORADU
✓ +1460 MY DEPOSIT	WIRE
+ 2340 cks Rtn	WIRE
+ 350233 TOTAL BALANCE	✓ + 466 WIRE IN - Argenta
* HAND DELIVER N.L. 550000 -	✓ + 520 WIRE IN - Turbo
DRAWING N.L. 1465040 - 7/1	✓ + 3650 WIRE IN - STERLING ✓
110000 - 7/1	✓ + 17000 WIRE IN - M-INVEST
DRAWING SPECIAL 250000 7/1	- 26959 NET WIRES **** ✓
PIKONCE	WIRING OUT 251H 7/1 MARRIN
MAILED IN STATE 1427501 -	3ml 7/1 PIONEER
MAILED OUT STATE 352875 -	WIRING OUT 150850 - 7/2 MARRIN
GIVING YOU N.L. - 0	1852,488.57 7/1 5ml
	WIRING OUT possible 30 ml
	7/1 FAIRFIELD
	WIRING OUT 2ml 7/1 THYBO
	1,130,000 - 7/2 BNP
	WIRING OUT 350 M - 7/1 6/2000
	1ml - 7/1 Klem
	WIRING OUT 500H - 7/2 POND
	WIRING OUT
	WIRING OUT
	WIRING OUT

MADTSS00244687

MADTSS01309801

34. Each Handwritten Ledger and Daily Sheet identified the banking institution to which the handwritten document related, including JPMorgan Chase¹³ and Bankers Trust,¹⁴ the

¹¹ Daily Sheets for only four business days were missing across this nearly 15-year time period: 9/28/1995, 1/12/1998, 5/11/1998, and 8/15/2003.

¹² The Daily Sheets were completely handwritten until mid-November 1998 when the BLMIS employees began using a pre-printed template.

¹³ Referred to on the handwritten documents as predecessor banks to JPMorgan Chase, including "MH" (for Manufacturers Hanover), "Chemical" (for Chemical Bank), "C.M." (for Chase Manhattan), or "Chase."

¹⁴ Referred to on the handwritten documents as "B.T." or "Bankers."

two banking institutions used by the IA Business for cash transactions with customers. I performed the following related to these handwritten documents:

- Analyzed month-end Handwritten Ledgers and month-end Daily Sheets for the 10 Year Period and reconciled the activity reflected on these documents to BLMIS bank records and BLMIS customer deposits and withdrawals with month-end dates reflected on customer statements,¹⁵ to determine the reliability of these documents during the period prior to December 1998 (the “Pre-10 Year Period”) when BLMIS bank records were not available.
- Analyzed month-end Handwritten Ledgers and month-end Daily Sheets for the Pre-10 Year Period and reconciled BLMIS customer deposits and withdrawals with month-end dates reflected on customer statements to the cash activity reflected on these handwritten documents,¹⁶ to determine if these handwritten documents consistently reflected customer cash deposits and withdrawals.

B. ANALYSIS OF HANDWRITTEN DOCUMENTS IN THE 10 YEAR PERIOD

35. My team and I analyzed the activity reflected on the month-end Handwritten Ledgers and month-end Daily Sheets during the 10 Year Period and reconciled this activity to BLMIS bank records and BLMIS customer cash transactions reflected on customer statements. During the 10 Year Period, the activity on both the Handwritten Ledgers and Daily Sheets was primarily related to JPMorgan Chase. There were also documents reflecting activity for Bankers Trust and Bank of New York in December 1998 and early 1999. The following

¹⁵ The month-end documents consisted of 128 Handwritten Ledgers and 128 Daily Sheets from December 1998 to November 2008. In addition, when applicable, we analyzed the handwritten documents, bank records and customer statements for the days before or after the month-end date being analyzed, or on a date that was identified in the transaction description as reflected on the BLMIS customer statements.

¹⁶ These month-end documents consisted of 162 Handwritten Ledgers and 162 Daily Sheets from April 1994 to November 1998 and 66 Handwritten Ledgers from December 1990 to March 1994. Again, as noted above, when applicable, we analyzed the handwritten documents and customer statements for the days before or after the month-end date being analyzed, or on a date that was identified in the transaction description as reflected on the BLMIS customer statements.

categories of cash activity for a given day were included in both the Handwritten Ledgers and Daily Sheets (with some variations in column headings or line items):

- “Checks Out” – customer withdrawals via check (separately for the 703 Account, the 509 Account, and when applicable, the BT Account);
- “My Deposits” – customer deposits via check (into the 703 Account);
- “Wires” – each wire transfer was listed separately, with a BLMIS customer name, or abbreviated name, noted next to or near the amount (703 Account and BT Account);
- “Tony In” / “Tony Out” – increases or decreases in loan balances;¹⁷
- “Trans” – transfers between banking institutions;¹⁸
- Check Returns, Stop Payments; and
- Balance – running balance on the Handwritten Ledgers and daily beginning and ending balance on the Daily Sheets.

36. I reconciled customer cash activity reflected in the categories listed above to BLMIS bank records and customer cash activity reflected on BLMIS customer statements.¹⁹ Of the approximately 4,700 cash deposit and cash withdrawal transactions dated month-end between December 1998 and December 2008 reflected on BLMIS customer statements, I reconciled over 99% to both the handwritten documents and the BLMIS bank records. Therefore, I can reasonably conclude that these handwritten documents can be relied upon as an indication of BLMIS customer cash activity in the absence of BLMIS bank records during the period prior to December 1998. Further, based on my analysis of these documents, I found that the information contained on the Handwritten Ledgers was consistent with the information contained on the Daily Sheets.²⁰

¹⁷ From December 1998 through March 1999.

¹⁸ From December 1998 through April 1999.

¹⁹ There were instances when we reconciled multiple transactions reflected in the BLMIS bank records and/or BLMIS customer statements to a single amount reflected on the Handwritten Ledgers and/or Daily Sheets. For example, customer cash withdrawals written via check from the 509 Account that related to cash withdrawals from multiple BLMIS customer accounts appeared as one amount on the Handwritten Ledgers. In this case, we reconciled the amount of “Checks Out” to a combination of multiple BLMIS customer cash withdrawal transactions.

²⁰ See also trial testimony of Winifier Jackson, 1105:13 – 1105:16, *United States v. Bonventre et al.*, No. 10 Cr. 228 (LTS) (S.D.N.Y.).

37. In addition, I noted that non-customer related transactions were reflected on the handwritten documents, including, for example, transfers to/from other BLMIS or Madoff bank accounts. I reconciled this activity to the BLMIS bank records. I also noted certain transactions reflected in the BLMIS bank records that were not included in the handwritten documents. These transactions included bank charges, fees or other bank adjustments, and transfers from the 703 Account to the Proprietary Trading Business.

38. See **Exhibit 9** for an example of my analysis and reconciliation of the handwritten documents for one month-end during the 10 Year Period.

C. ANALYSIS OF HANDWRITTEN DOCUMENTS IN THE PRE-10 YEAR PERIOD

39. My team and I also analyzed the activity reflected on the month-end Handwritten Ledgers and month-end Daily Sheets during the Pre-10 Year Period. From April 1994 through November 1998, we compared the month-end cash deposits and withdrawals reflected on BLMIS customer statements to month-end activity on the Handwritten Ledgers and Daily Sheets. From December 1990 through March 1994, we compared the month-end cash deposits and withdrawals reflected on BLMIS customer statements to month-end activity on the Handwritten Ledgers (as the Daily Sheets were not available during this time period). See **Exhibit 10** for an example of my analysis and reconciliation of the handwritten documents for one month-end during the Pre-10 Year Period.

40. Based on my analysis of month-end dates, the handwritten documents in the Pre-10 Year Period reflected similar categories of cash activity as described above in the section regarding my analysis of the 10 Year Period. More specifically, in the Pre-10 Year Period, I found a consistent pattern of cash activity where BLMIS customer cash deposits were reflected on the handwritten documents as deposits into bank accounts used by the IA Business for cash transactions with customers (*i.e.*, accounts at JPMorgan Chase and Bankers Trust), and customer cash withdrawals were reflected on the handwritten documents as outflows from these same bank accounts. Of the approximately 5,000 cash deposit and cash withdrawal

transactions dated month-end between December 1990 and November 1998 reflected on BLMIS customer statements, I reconciled approximately 94% to the handwritten documents.²¹

41. I also reviewed handwritten notebooks maintained by BLMIS employees that included notes and instructions on various topics, including, but not limited to, how to “Write your check card,” which appears to be detailed instructions on preparing the Handwritten Ledgers. One of these notebooks contained the date “8-1-83” on the cover.²² Based on my review, the step-by-step instructions followed the columns and information contained on the available Handwritten Ledgers.

42. BLMIS employees used the balance reflected on the Handwritten Ledgers for the JPMorgan Chase account to perform the monthly bank reconciliation of the balance in the 703 Account, referred to in BLMIS’s records as “Bank Reconcilements.” Dan Bonventre, who, along with Ruth Madoff, was responsible for the reconciliation of the balance in the 703 Account,²³ stated in his criminal trial testimony that “Jodi kept cash figures on index cards [*i.e.*, the Handwritten Ledgers] and ... when it was completed, [I] would go downstairs and take a look at her cards just to make sure that the balance she showed on the card was the same as the one that we were using to do this reconciliation [of the 703 Account].”²⁴ Based on my review of the available Bank Reconcilements for months in the Pre-10 Year Period (available back to January 1995), these documents reconciled “Our Balance,” which agreed to the balance reflected on the Handwritten Ledgers, to the “Bank Balance,” which agreed to the 703 Account balance per available bank reports.

²¹ Compared to the 10 Year Period, I noted in the Pre-10 Year Period more instances of BLMIS customer cash transactions not reflected on the handwritten documents. More specifically, I identified customer cash withdrawals dated month-end totaling approximately \$112 million that were missing from the month-end handwritten documents in the Pre-10 Year Period. Of this total, \$106 million, or approximately 95%, related to cash withdrawals from two BLMIS customer accounts – 1L0027 held by NORMAN F LEVY and 1FN007 held by BANQUE FINAMA. Similarly, I identified customer cash deposits dated month-end totaling approximately \$25 million that were missing from the month-end handwritten documents in the Pre-10 Year Period. Of this total, \$12 million, or close to 50%, related to cash deposits in 1L0027 held by NORMAN LEVY.

²² See MADTSS00976520 – MADTSS00976598.

²³ See trial testimony of Daniel Bonventre, 9558:16 – 9559:6; 9830:16 – 9830:21. See also trial testimony of Frank DiPascali, 4964:1 – 4964:2.

²⁴ See trial testimony of Daniel Bonventre, 9565:18 – 9566:1. See also trial testimony of Daniel Bonventre, 10079:2 – 10079:6.

D. RESULTS OF ANALYSIS

43. Based on my review and analysis of the month-end Handwritten Ledgers and month-end Daily Sheets during the 10 Year Period, I found that these documents reflected BLMIS customer cash deposits and cash withdrawals, which I reconciled to both BLMIS bank records and BLMIS customer statements. Therefore, I can reasonably conclude that these handwritten documents can be relied upon as an indication of BLMIS customer cash activity in the absence of BLMIS bank records during the Pre-10 Year Period.

44. Based on my review and analysis of the handwritten documents for month-ends in the Pre-10 Year period back to December 14, 1990, I found a consistent pattern of cash activity where BLMIS customer cash deposits were reflected on the handwritten documents as deposits into bank accounts used by the IA Business for cash transactions with customers, and customer cash withdrawals were reflected on the handwritten documents as outflows from these same bank accounts. This customer cash activity is consistent with the activity in the 10 Year Period. Also consistent with the 10 Year Period, I saw no disbursement of funds for the purchase of stocks or equities on behalf of customers of the IA Business, nor did I see any receipt of funds from the sale of stocks or equities reflected on the month-end handwritten documents that I analyzed from the Pre-10 Year Period.

VII. ANALYSIS OF NON-CUSTOMER ACTIVITY IN THE 703 ACCOUNT

A. OVERVIEW

45. As noted above, **Exhibit 4** to this report sets forth the results of my analysis of the activity in the 703 Account based on available bank records for the 10 Year Period, defined above as the period December 1998 to December 2008. **Exhibit 4** includes a summary of the 703 Account activity which separates the activity into three categories: 1) Customer Transactions, 2) Investment Flows, and 3) Other Transactions.

46. My Global Reconciliation, as described in **Section V** above, covers the first category – Customer Transactions. This section of my report will address the other two categories – Investment Flows and Other Transactions. Specifically, I was asked to identify and analyze

this remaining activity in the 703 Account that I did not reconcile to BLMIS customer cash deposits or withdrawals, to determine whether this activity was for BLMIS's cash management purposes.²⁵ To do this, I performed the following:

- Analyzed transactions relating to short-term investments made directly from the 703 Account to determine: (a) the types, amounts, and timing of these short-term investments, and (b) the related income earned on the investments; and
- Analyzed other transactions in the 703 Account, including transfers to and from bank and brokerage accounts held in the name of BLMIS or Madoff, to determine: (a) the amounts and timing of the flow of funds between the 703 Account and the brokerage accounts, (b) the types, amounts, and timing of investments made from these brokerage accounts, and (c) the related income earned on investments in the brokerage accounts.

B. SHORT-TERM INVESTING ACTIVITY IN THE 703 ACCOUNT

47. As indicated in **Figure 1** in **Section V** above, 0.4% of the inflows into the 703 Account during the 10 Year Period was income from short-term investments made directly from the 703 Account. BLMIS invested excess cash in the 703 Account on a regular basis, to earn interest rather than having excess cash sit idle.²⁶ The types of investments made from the 703 Account, as described further below and as summarized on **Exhibit 11**, are short-term, highly liquid, and low-risk investments.²⁷ The activity described below represents different types of investments used to earn interest on excess cash and supports that the short-term investments made from the 703 Account were made for BLMIS's cash management purposes and not on behalf of any individual BLMIS customer.²⁸

²⁵ For purposes of my report, cash management refers to managing excess cash in the 703 Account by investing funds to earn interest, while maintaining liquidity for when funds are needed.

²⁶ See also trial testimony of Walter Tiletnick, 3604:19 – 3606:22.

²⁷ See also **Exhibit 17** for a schedule of the combined IA Business monthly cash and investment balances. This exhibit also includes the monthly amount of net customer cash deposits and withdrawals.

²⁸ Between December 1998 and March 2005, transfers from the 703 Account to the Proprietary Trading Business equaled, or approximated, the interest earned on short-term investments in the 703 Account.

Overnight Sweeps

48. An overnight sweep generally occurs for amounts that exceed a certain level in a bank account. Excess amounts in a bank account get swept into a higher interest-earning investment at the close of each business day. Between February 2002 and December 2008, there were overnight sweeps from the 703 Account on a daily basis, and contained "OVERNIGHT", "SWEEP" and/or "END-OF-DAY" in the transaction description. The amount swept overnight was transferred back into the 703 Account the next day along with interest that was earned overnight.

Overnight Deposits

49. An overnight deposit is another means by which excess cash in a bank account is invested. An overnight deposit is a short-term account that earns a fixed interest rate for a one day term. Between December 1998 and December 2008, there were overnight deposits from the 703 Account on a daily basis, and contained "NASSAU DEPOSIT TAKEN" or "JPMORGAN CHASE & CO DEP TAKEN" in the transaction description. The amount of the prior business day's deposit plus interest earned was transferred back into the 703 Account the next day.

Commercial Paper

50. Commercial paper is another short-term investment option to invest excess cash in a bank account. Commercial paper is an unsecured investment that typically matures within 30 days or less. Between December 1998 and February 2006, there were purchases of commercial paper from the 703 Account that matured within 1 to 7 days and contained "PURCH OF/SALE OF CHEM COMM PAPER" or "PURH OF/SALE OF JPMORGAN CHASE CP" in the transaction description. When the commercial paper matured, the amount of the original investment was transferred back into the 703 Account along with interest that was earned on the short-term investment.

Certificates of Deposit

51. There were two other types of short-term investments that I have categorized as Certificates of Deposit (CDs) for purposes of summarizing the activity in the 703 Account, as shown on **Exhibit 4**.²⁹ Generally, CDs refer to time deposits with a bank.

- Between December 1998 and September 2005, there were investments of funds in the 703 Account with a reference to a "PURCHASE", "MATURITY" and "INTEREST" by "TICKET" number. These short-term investments were held for 6 to 90 days. When the investments matured, the amount of the corresponding purchase (matched by ticket number) was transferred back into the 703 Account along with interest that was earned during the time the amount was invested (again matched by ticket number).
- Between August 2006 and August 2008, there were investments of funds in the 703 Account with references in the transaction description to "BOOK TRANSFER DEBIT A/C: D323522B45." These short-term investments were held for 6 to 28 days. When the investment matured, the amount of the original investment plus interest earned was transferred back into the 703 Account. The amounts invested in this type of short-term investment between August 2006 and August 2008 were close to \$1 billion to over \$3 billion. During this same time period, customer cash deposits were exceeding customer cash withdrawals, contributing to excess cash in the 703 Account, further supporting the use of these short-term investments for cash management purposes.³⁰

Treasury Bills

52. Consistent with the other short-term investments described above, excess cash from the 703 Account was invested in Treasury Bills.³¹ The majority of the investments in Treasury

²⁹ See trial testimony of Frank DiPascali, 4960:15 – 4961:13. See also MADTSS01318062.

³⁰ See **Exhibit 17**.

³¹ See trial testimony of Frank DiPascali, 4931:12 – 4931:23.

Bills made directly from the 703 Account occurred between March 2007 and August 2008 - a time period when customer cash deposits were exceeding customer cash withdrawals, contributing to excess cash in the 703 Account.³²

53. Treasury Bills are low-risk, highly liquid investments that are easily converted to cash. Investments in Treasury Bills were made via transfers from the 703 Account to a broker, National Financial Services Corp. ("NFS"). NFS would then deliver the Treasury Bills to a custody account held at JPMorgan Chase by BLMIS ("JPMC G 13414 Account"). When the Treasury Bills held in BLMIS's JPMC G 13414 Account were sold or redeemed, the cash proceeds from the sale or redemption of the Treasury Bills were transferred from NFS to the 703 Account.

54. Treasury Bills purchased from the 703 Account were held for periods ranging from six days to four and a half months. Through September 2008, Treasury Bills purchased from the 703 Account were held to maturity, rather than being sold early. Beginning in October 2008, when customer withdrawals were exceeding customer deposits and BLMIS had an increasing need for cash, Treasury Bills purchased from the 703 Account were sold prior to maturity, further supporting the use of Treasury Bills as a cash management tool by BLMIS.

55. Approximately \$110 million of earnings on Treasury Bills held in the JPMC G 13414 Account (*i.e.*, the difference between the purchase price of the Treasury Bills and the proceeds received when redeemed or sold) was received in the 703 Account between June 2007 and November 2008. *See Exhibit 12* for the detail of the purchases and sales/redemptions of Treasury Bills held in the JPMC G 13414 Account, including the interest earned on each sale.

C. ACTIVITY IN BROKERAGE ACCOUNTS

56. In addition to the short-term investments made directly from the 703 Account as described above, BLMIS also made investments with funds transferred from the 703 Account to certain brokerage accounts held by BLMIS or Madoff for BLMIS's cash management purposes. The "Other Transactions" section of the summary of activity in the 703 Account attached as

³² *See Exhibit 17.*

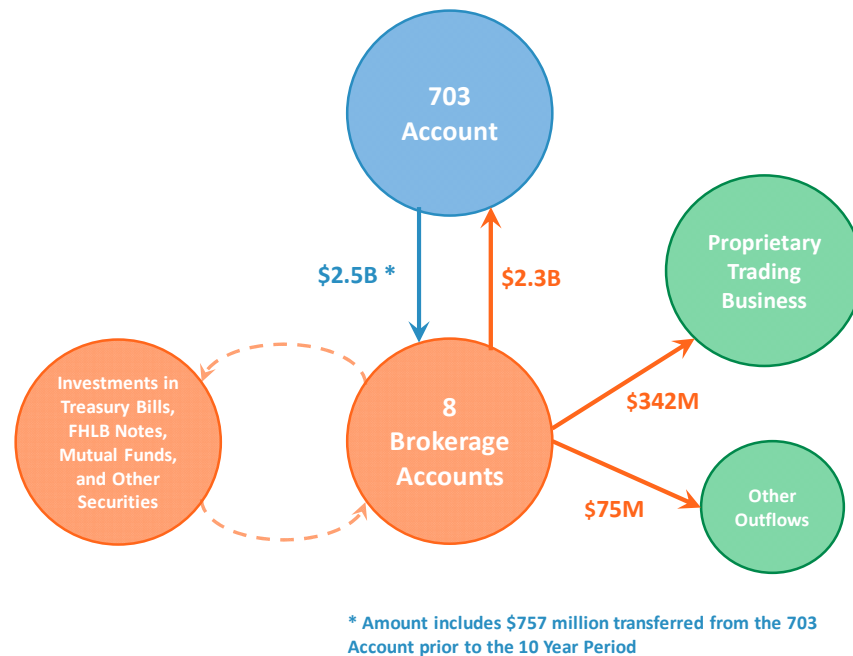
Exhibit 4 includes line items for other incoming and outgoing wires and other incoming and outgoing checks. **Exhibit 13**, which is a schedule detailing these other incoming and outgoing wires and other incoming and outgoing checks, shows that a significant portion of this other activity relates to transfers to and from the 703 Account and eight brokerage accounts held by BLMIS or Madoff at various financial institutions (the “8 Brokerage Accounts”).

57. The 8 Brokerage Accounts, which, as further discussed below, were used by BLMIS for cash management purposes, received funds solely from the 703 Account and invested these funds primarily in money market funds, Treasury Bills, and other low-risk, US government securities.³³ The 8 Brokerage Accounts transferred funds back to the 703 Account, as well as to the Proprietary Trading Business.³⁴ **Figure 6** below is a flowchart of the activity in the 8 Brokerage Accounts:

³³ See also trial testimony of Frank DiPascali, 4961:22 – 4962:9.

³⁴ I identified instances where the transfers from certain of the 8 Brokerage Accounts to the Proprietary Trading Business equaled the interest earned in the brokerage account from which the transfer to the Proprietary Trading Business was made. For example, on November 26, 2004, there were two transfers from one of the 8 Brokerage Accounts (the Bear Stearns 698 Account) to the Proprietary Trading Business (BONY 621 Account) totaling \$13,805,109. Available handwritten notes from BLMIS’s records reference “\$13,805,108.64 from Bear on Friday 11/26,” and a supporting calculation of this total amount includes “Interest for 2004 from BEST T-B Acct” of \$8,277,708 “thru Nov.” This exact amount appears on the monthly account statement for the Bear Stearns 698 Account for the period ending October 29, 2004 as Year to Date income on government securities. See PUBLIC-USAO_1013122; PUBLIC-USAO_0960238; BSTSAC0000162.

Figure 6
Flowchart of Activity in 8 Brokerage Accounts



58. **Exhibit 14** is a summary chart of the 8 Brokerage Accounts and **Exhibit 15.1 – Exhibit 15.8** contain the detailed activity in each of the 8 Brokerage Accounts. These exhibits identify the types of securities held in each of the 8 Brokerage Accounts, including various types of US government securities, which are unlike the equity securities purportedly held in the BLMIS customer accounts.

59. To further support that the 8 Brokerage Accounts were used for cash management purposes by BLMIS, I analyzed the timing of the transfers between the 703 Account and the 8 Brokerage Accounts. Based on this analysis, I found that transfers were made *from* the 703 Account to the 8 Brokerage Accounts when the combined 703 Account and short-term investments balance was increasing. For example, as of the end of November 1999, the combined 703 Account and short-term investments balance had increased to over \$1 billion. During the next month, in December 1999, BLMIS transferred a total of \$300 million to two of

the 8 Brokerage Accounts, which, in turn, invested the funds in various government securities. See **Exhibit 15.3**, **Exhibit 15.5** and **Exhibit 17**.

60. Conversely, transfers were made *to* the 703 Account from the 8 Brokerage Accounts when the combined 703 Account and short-term investments balance was decreasing. For example, as of the end of September 2001, the combined 703 Account and short-term investments balance decreased to approximately \$100 million from close to \$500 million earlier in 2001. During the next month, in October 2001, BLMIS transferred over \$200 million to the 703 Account from two of the 8 Brokerage Accounts. See **Exhibit 15.1**, **Exhibit 15.5** and **Exhibit 17**.

61. In addition, I noted that while there were over 30,000 customer cash deposits into the 703 Account on over 2,000 different days between December 1998 and December 2008 (based on my analysis of the 703 Account described above in **Section V**), there were only 21 transfers from the 703 Account to the 8 Brokerage Accounts on only 14 different days during this same period. Further, the transfers from the 703 Account to the 8 Brokerage Accounts were made in large, round dollar denominations (*i.e.*, all but two were between \$25 million and \$150 million), and were used to purchase large quantities of money market funds and debt instruments, such as Treasury Bills and other government securities.

D. RESULTS OF ANALYSIS

62. Based on my analyses described above, I have concluded that the investing activity in the 703 Account and the 8 Brokerage Accounts, including purchases and sales of Treasury Bills, was for BLMIS's cash management purposes. Further, in all my analyses described above, I did not see any reference to specific BLMIS customers in transaction descriptions for the 703 Account short-term investments or activity in the 8 Brokerage Accounts, and therefore, I have also concluded that this activity was not for any particular customer account.³⁵

³⁵ See also trial testimony of Frank DiPascali, 4803:23 – 4804:12.

VIII. INTEREST EARNED ON TREASURY BILLS

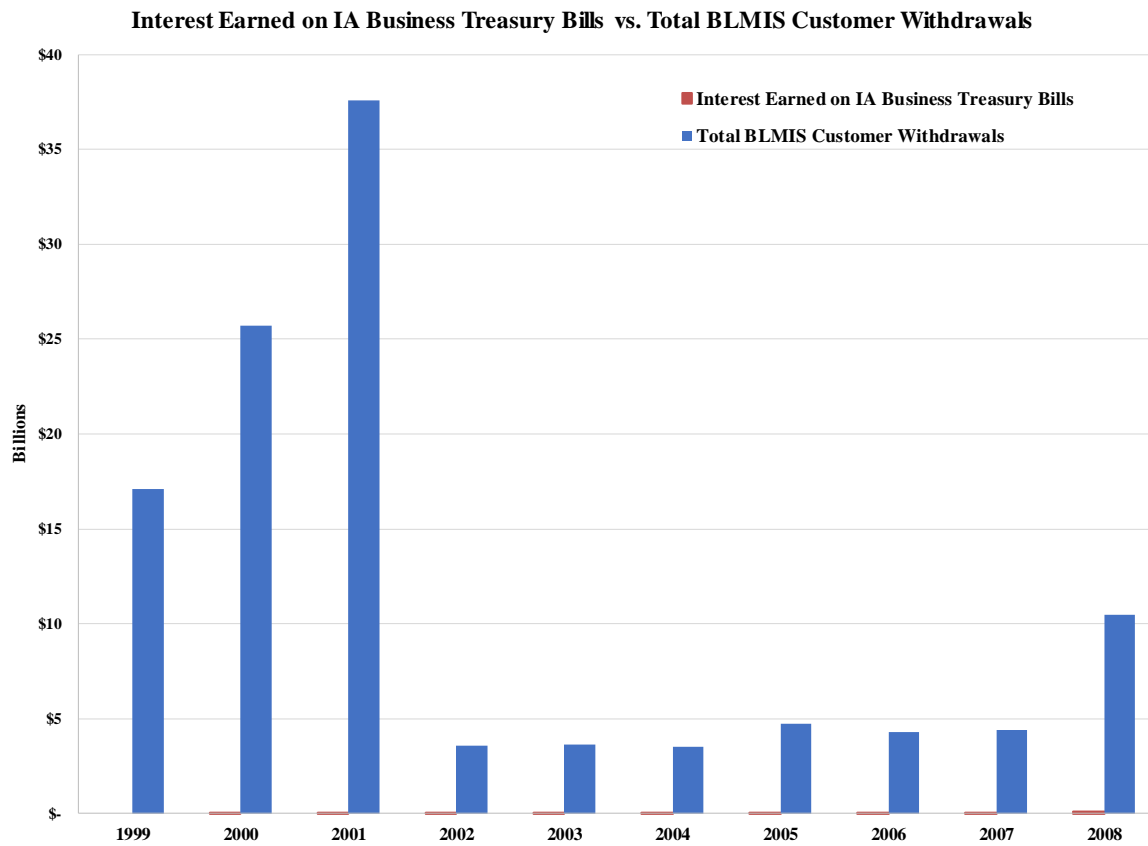
A. OVERVIEW

63. I was asked to determine whether the interest earned on Treasury Bills (*i.e.*, the difference between the proceeds received and the purchase price of the Treasury Bills) purchased directly or indirectly with funds from the 703 Account was sufficient to pay BLMIS customer withdrawals. To do this, I first determined the total amount of interest earned on Treasury Bills held in the JPMC G 13414 Account and in six of the 8 Brokerage Accounts each year during the 10 Year Period. *See Exhibit 12 and Exhibit 16.* I then compared the annual interest amounts to the total amount of BLMIS customer withdrawals each year and calculated the interest as a percentage of total customer withdrawals.

B. RESULTS OF ANALYSIS

64. The annual interest earned on Treasury Bills held in the JPMC G 13414 Account and six of the 8 Brokerage Accounts ranged from 0% to 1% of the annual customer withdrawals during the 10 Year Period. More specifically, during 1999, there was no interest earned on Treasury Bills, while there were over \$17 billion in customer withdrawals. In 2000, there was approximately \$229,000 earned on Treasury Bills compared to over \$25 billion in customer withdrawals, representing .001%. For each year from 2001 – 2008, total annual interest on Treasury Bills ranged from \$1.8 million to \$73.2 million compared to customer withdrawals that ranged from \$3.5 *billion* to \$37.6 *billion*. **Figure 7** below is a graphical depiction of the annual comparison. *See also Exhibit 18.*

Figure 7



65. Therefore, I conclude that the interest earned on Treasury Bills purchased directly or indirectly with funds from the 703 Account was insufficient to pay BLMIS customer withdrawals.

IX. SIGNATURE AND RIGHT TO MODIFY

66. This report and the exhibits contained herein present my findings and the bases thereof. To the extent that any additional information is produced by any party, I reserve the right to incorporate such additional information into my report or to modify my report as necessary.

By:

A handwritten signature in cursive script that reads "Lisa M. Collura".

Lisa M. Collura, CPA, CFE, CFF
January 16, 2019

X. LIST OF EXHIBITS

Exhibit 1: Curriculum Vitae
Exhibit 2: Documents Considered
Exhibit 3: List of Known BLMIS/Bernard L. Madoff Bank and Brokerage Accounts
Exhibit 4: Excel Spreadsheet "JPMC 703 Account Activity – December 1998 to December 2008"
Exhibit 5: Excel Spreadsheet "JPMC 509 Account Activity – December 1998 to December 2008"
Exhibit 6: Excel Spreadsheet "BT 599 Account Activity – December 1998 to May 1999"
Exhibit 7: Example of a Handwritten Ledger
Exhibit 8.1: Example of Daily Sheets Pre-November 1998
Exhibit 8.2: Example of a Daily Sheet Post-November 1998
Exhibit 9: Example of Analysis of Handwritten Documents in 10 Year Period
Exhibit 10: Example of Analysis of Handwritten Documents in Pre-10 Year Period
Exhibit 11: Summary Chart of Short-Term Investments in the 703 Account
Exhibit 12: Treasury Bill Activity in JPMC G 13414 Account
Exhibit 13: Detail of Other Wires and Checks in/out of the 703 Account
Exhibit 14: Summary Chart of the 8 Brokerage Accounts
Exhibit 15.1: Bear Stearns 698 Account Activity
Exhibit 15.2: Fidelity 043 Account Activity
Exhibit 15.3: Lehman 398 Account Activity
Exhibit 15.4: Lehman 152 Account Activity
Exhibit 15.5: Morgan Stanley 719 Account Activity
Exhibit 15.6: BONY 239 Account Activity
Exhibit 15.7: Lehman 435 Account Activity
Exhibit 15.8: M&T 039 Account Activity
Exhibit 16: Treasury Bill Activity in Six of the 8 Brokerage Accounts
Exhibit 17: IA Business Monthly Cash & Investment Balances
Exhibit 18: Interest Earned on Treasury Bills vs. Total BLMIS Customer Withdrawals